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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,973	01/16/2004	James Stoffer	423.021US1	6511
21186	7590	09/01/2006		
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. BOX 2938 MINNEAPOLIS, MN 55402				
			EXAMINER FEELY, MICHAEL J	
			ART UNIT 1712	PAPER NUMBER

DATE MAILED: 09/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/758,973

Applicant(s)

STOFFER ET AL.

Examiner

Michael J. Feely

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6,9-28,30-56,59-61,63-104,112,113,115-120 and 123-150 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) See Continuation Sheet are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**Continuation of Disposition of Claims: Claims subject to restriction and/or election requirement are 1-6,9-28,30-56,59-61,63-104,112,113,115-120 and 123-150.**

## **DETAILED ACTION**

### ***Pending Claims***

Claims 1-6, 9-28, 30-56, 59-61, 63-104, 112, 113, 115-120, and 123-150 are pending.

### ***Previous Restriction Requirement***

1. The previous restriction requirement has been rendered moot by the amendment filed March 30, 2006.

### ***New Election of Species Requirement***

2. The composition set forth in the instant claims features two core ingredients:

- (A) one or more corrosion-inhibiting carbon pigments;
- (B) one or more binders.

The composition set forth in the instant claims further features the following additional components:

- (C) one or more extenders;
- (D) one or more amino acids;
- (E) one or more co-inhibitors/rare earth compounds.

Of the above-mentioned components, components (A), (B), (C), and (E) are presented with burdensome sets of species.

With respect to component (A): Claims 1, 3-6, 16-28, 38-41, 45-49, 52-56, 60, 61, 63, 65-72, 74-81, 83-87, 89-92, 95, 96, 99-104, 113, 115-120, 123-127, and 129-150 are generic with respect to the carbon pigment. With respect to the remaining claims, applicant is required to elect one of the following species:

Art Unit: 1712

- (Ai) Surface modified (*see claims 2, 9, 10, 30-37, 42-44, 50, 51, 59, 64, 73, 82, 88, 93, 94, 97, and 98*);
- (Aii) Conductive (*see claim 11*);
- (Aiii) Non-Conductive (*see claim 128*);
- (Aiv) Acetylene black (*see claim 12*);
- (Av) Channel black (*see claim 12*);
- (Avi) Furnace black (*see claim 12*);
- (Avii) Lamp black (*see claim 12*);
- (Aviii) Thermal black (*see claim 12*);
- (Aix) Bone black (*see claim 12*);
- (Ax) Elemental form of carbon (*see claim 13*);
- (Axi) Amorphous form of carbon (*see claim 14*);
- (Axii) Carbon-containing mixture (*see claim 15*);
- (Axiii) Crystalline carbon (*see claim 112*).

Should Applicant elect (Ai), Applicant is further required to elect one of the following sub-species:

- (Aia) Inorganic dispersed carbon black (*see claims 9, 31, 43, and 50*);
- (Aib) Resin-dispersed carbon black (*see claims 10, 32, and 44*);
- (Aic) Surfactant-dispersed carbon black (*see claims 10, 32, 44, 93, and 97*);
- (Aid) Carbon black (*see claims 51 and 59*).

The species and sub-species are independent or distinct because each would require a separate search strategy.

Art Unit: 1712

With respect to component (B): Claims 1-6, 9-17, 24-28, 30-34, 36-46, 48-54, 56, 59, 61, 63-66, 68-75, 77-83, 85-104, 112, 113, 115-120, 124-128, 131-133, and 138-150 are generic with respect to the binder. With respect to the remaining claims, applicant is required to elect one of the following species:

- (Bi) Organic/Resin binder (*see claims 18-23, 35, 47, 55, 60, 67, 76, 84, 123, and 134-137*);
- (Bii) Inorganic binder (*see claims 23, 129, and 130*).

Should Applicant elect (Bi), Applicant is further required to elect one of the following sub-species:

- (Bia) Epoxy-based resin binder (*see claims 19-21, 35, 47, 55, 60, and 134-137*);
- (Bib) Non epoxy-based binder (*see claims 22 and 23*).

Should Applicant elect (Bia), Applicant is further required to elect one of the following sub-species:

- (Bia1) Amine cured epoxy-based resin binder (*see claim 20*);
- (Bia2) Water-reducible epoxy-based resin binder (*see claim 21*).

Should Applicant elect (Bib), Applicant is further required to elect one of the following sub-species:

- (Bib1) Urethanes (*see claim 23*);
- (Bib2) Ureas (*see claim 23*);
- (Bib3) Acrylates (*see claim 23*);
- (Bib4) Alkyds (*see claim 23*);

Art Unit: 1712

- (B1b5) Melamines (*see claim 23*);
- (B1b6) Polyesters (*see claim 23*);
- (B1b7) Vinyls (*see claim 23*);
- (B1b8) Vinyl esters (*see claim 23*);
- (B1b9) Organo-sulfides (*see claim 23*);
- (B1b10) Organo-sulfones (*see claim 23*);
- (B1b11) Drying oils (*see claim 23*);
- (B1b12) Hydrocarbon polymers (*see claim 23*).

Should Applicant elect (Bii), Applicant is further required to elect one of the following sub-species:

- (Biia) Organo-silicones (*see claims 23 and 130*);
- (Biib) Organo-siloxanes (*see claims 23 and 130*);
- (Biic) Organo-silicates (*see claims 23 and 130*).

The species and sub-species are independent or distinct because each would require a separate search strategy.

With respect to component (C): Claims 1, 2, 4, 5, 9-23, 28, 49-52, 55, 56, 63-71, 81-86, 92-94, 96-98, 100-104, 112, 113, 119, 125-130, 134, 136, 139, 141, 143, 145, 147, and 149 do not feature an extender. Of the remaining claims, there is no generic claim with respect to the extender, and Applicant is required to elect one of the following species:

- (Ci) One that does not substantially solubilize in coating composition (*see claim 120*);

Art Unit: 1712

- (Cii) Neutral to slightly acidic (*see claims 3, 6, 24-27, 30-48, 53, 54, 59-61, 72-80, 87-91, 95, 99, 115-118, 120, 123, 124, 131-133, 135, 137, 138, 140, 142, 144, 146, 148, and 150*);
- (Ciii) Acidic (*see claims 3, 6, 24-27, 30-48, 53, 54, 59-61, 72-80, 87-91, 95, 99, 115-118, 120, 123, 124, 131-133, 135, 137, 138, 140, 142, 144, 146, 148, and 150*);

Should Applicant elect (Cii) or (Ciii), Applicant is further required to elect one of the following sub-species:

- (Cii<sub>a</sub>)/(Ciii<sub>a</sub>) Sulfur-containing compound/salt (*see claims 24, 25, 33, 45, 54, 115-117, and 133*);
- (Cii<sub>b</sub>)/(Ciii<sub>b</sub>) Phosphorus-containing compound/salt (*see claims 24, 25, 33, 45, and 54*);
- (Cii<sub>c</sub>)/(Ciii<sub>c</sub>) Silicon oxyanion-containing compound (*see claims 24, 25, 33, 45, and 54*).

Should applicant elect (Cii<sub>a</sub>)/(Ciii<sub>a</sub>), Applicant is further required to elect one of the following sub-species:

- (Cii<sub>a</sub>1)/(Ciii<sub>a</sub>1) Sulfates (*see claims 25, 33, 45, 54, 115-117, and 133*)
- (Cii<sub>a</sub>2)/(Ciii<sub>a</sub>2) Sulfites (*see claims 25, 33, 45, and 54*);
- (Cii<sub>a</sub>3)/(Ciii<sub>a</sub>3) Sulfonates (*see claims 25, 23, 45, and 54*);

Should applicant elect (Cii<sub>b</sub>)/(Ciii<sub>b</sub>), Applicant is further required to elect one of the following sub-species:

- (Cii<sub>b</sub>1)/(Ciii<sub>b</sub>1) Phosphates (*see claims 25, 26, 33, 45, 54, and 118*)
- (Cii<sub>b</sub>2)/(Ciii<sub>b</sub>2) Phosphonites (*see claims 25, 33, 45, and 54*)



Art Unit: 1712

The species and sub-species are independent or distinct because each would require a separate search strategy.

With respect to component (E): Claims 1-4, 6, 9-27, 30-35, 59, 60, 63-80, 87-94, 96-98, 100-104, 112, 113, 115-118, 120, 123, 125-135, 137-139, 141, 142, 144-148, and 150 do not feature co-inhibitors/rare earth compounds. Of the remaining claims, claims 5, 28, 36-38, 42-51, 53-56, 61, 81-86, 95, 99, 124, 136, 140, 143, and 149 are generic claim with respect to the co-inhibitors/rare earth compounds, and Applicant is required to elect one of the following species:

- (Ei) Cerium salt (*see claims 39 and 40*);
- (Eii) Neodymium salt (*see claims 39 and 40*);
- (Eiii) Praseodymium salt (*see claims 39-41, 52, and 119*);
- (Eiv) Ytterbium salt (*see claims 39 and 40*);
- (Ev) Yttrium salt (*see claims 39 and 40*);
- (Evi) Terbium salt (*see claims 39 and 40*).

Should Applicant elect (Ei), Applicant is further required to elect one of the following sub-species:

- (Ei1) cerium oxide (*see claim 40*);
- (Ei2) cerium hydroxide (*see claim 40*);
- (Ei3) cerium solid solution mixed oxide (*see claim 40*);
- (Ei4) cerium oxide mixture (*see claim 40*).

Should Applicant elect (Eii), Applicant is further required to elect one of the following sub-species:

Art Unit: 1712

- (Eii1) neodymium oxide (*see claim 40*);
- (Eii2) neodymium hydroxide (*see claim 40*);
- (Eii3) neodymium oxide mixture (*see claim 40*).

Should Applicant elect (Eiii), Applicant is further required to elect one of the following sub-species:

- (Eiii1) Praseodymium oxide (*see claims 40, 41, 52, and 119*);
- (Eiii2) Praseodymium hydroxide (*see claims 40, 41, and 52*);
- (Eiii3) Praseodymium solid solution mixed oxide (*see claim 40*);
- (Eiii4) Praseodymium oxide mixture (*see claim 40*);
- (Eiii5) Praseodymium sulfate (*see claim 119*);

Should Applicant elect (Eiv), Applicant is further required to elect one of the following sub-species:

- (Eiv1) Ytterbium oxide (*see claim 40*);
- (Eiv2) Ytterbium hydroxide (*see claim 40*);
- (Eiv3) Ytterbium solid solution mixed oxide (*see claim 40*);
- (Eiv4) Ytterbium oxide mixture (*see claim 40*).

Should Applicant elect (Ev), Applicant is further required to elect one of the following sub-species:

- (Ev1) Yttrium oxide (*see claim 40*);
- (Ev2) Yttrium hydroxide (*see claim 40*);
- (Ev3) Yttrium oxide mixture (*see claim 40*).

Art Unit: 1712

Should Applicant elect (Evi), Applicant is further required to elect one of the following sub-species:

- (Evi1) Terbium oxide (*see claim 40*);
- (Evi2) Terbium hydroxide (*see claim 40*);
- (Evi3) Terbium solid solution mixed oxide (*see claim 40*);
- (Evi4) Terbium oxide mixture (*see claim 40*).

The species and sub-species are independent or distinct because each would require a separate search strategy.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species, even though this requirement is traversed. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Art Unit: 1712

3. Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

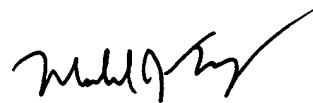
Art Unit: 1712

***Communication***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Feely whose telephone number is 571-272-1086. The examiner can normally be reached on M-F 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Michael J. Feely  
Primary Examiner  
Art Unit 1712

August 30, 2006

**MICHAEL FEELY**  
**PRIMARY EXAMINER**